## APR 10 2007 83

<221> MISC\_FEATURE

## SEQUENCE LISTING

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Novo Nordisk A/S
      Novel GLP-1 derivatives
<120>
      6692-WO
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<170> PatentIn version 3.1
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Gln Ala Ala Lys Glu Phe Ile Ala Trp Leu Val Lys Gly Arg Gly
                                25
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<222> (1)..(1)
<223> Xaa at position 1 is L-histidine, D-histidine, desamino-histidine
       , 2-amino-histidine, beta-hydroxy-histidine, homohistidine, N-alp
      ha-acetyl-histidine, alpha-fluoromethyl-histidine, alpha-methyl-h
      istidine, 3-pyridylalanine, 2-pyridylalanine, or 4-pyridylalanine
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      (2)..(2)
      Xaa at position 2 is Ala, Gly, Val, Leu, Ile, Lys, Aib, (1-aminoc
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      yclopropyl) carboxylic acid, (1-aminocyclobutyl) carboxylic acid,
       (1-aminocyclopentyl) carboxylic acid, (1-aminocyclohexyl) carboxy
      lic acid, (1-aminocycloheptyl) carboxylic acid or (1-aminocyclooc
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<222> (10)..(10)
<223> Xaa at position 10 is Val or Leu.
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<222> (12)..(12)
<223> Xaa at position 12 is Ser, Lys or Arg.
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<222> (13)..(13)
<223> Xaa at position 13 is Tyr or Gln.
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<223> Xaa at position 17 is Gln, Glu, Lys or Arg.
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<222> (19)..(19)
<223> Xaa at position 19 is Ala or Val.
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<222> (20)..(20)
<223> Xaa at position 20 is Lys, Glu or Arg.
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<222> (21)..(21)
<223> Xaa at position 21 is Glu or Leu.
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<223> Xaa at position 24 is Ala, Glu or Arg.
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<222> (27)..(27)
<223> Xaa at position 27 is Val or Lys.
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<222> (28)..(28)
<223> Xaa at position 28 is Lys, Glu, Asn or Arg.
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<222> (29)..(29)
<223> Xaa at position 29 is Gly or Aib.
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<223> Xaa at position 30 is Arg, Gly or Lys.
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<222> (31)..(31)
<223> Xaa at position 31 is Gly, Ala, Glu, Pro, Lys, amide or is absent
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<222> (32)..(32)
<223> Xaa at position 32 is Lys, Ser, amide or is absent.
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<223> Xaa at position 34 is Gly, amide or is absent.
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<222> (35)..(35)
<223> Xaa at position 35 is Ala, amide or is absent.
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<223> Xaa at position 36 is Pro, amide or is absent.
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      (37)..(37)
<223> Xaa at position 37 is Pro, amide or is absent.
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<223> Xaa at position 39 is Ser, amide or is absent.
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<222> (40)..(40)
<223> Xaa at position 40 is amide or is absent.
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               5
                                   10
Xaa Ala Xaa Xaa Ala Phe Ile Xaa Trp Leu Xaa Xaa Xaa Xaa Xaa
            20
                                25
Xaa Xaa Xaa Xaa Xaa Xaa Xaa
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      (1)..(1)
      Xaa at position 1 is L-histidine, D-histidine, desamino-histidine
       , 2-amino-histidine, beta-hydroxy-histidine, homohistidine, N-alp
       ha-acetyl-histidine, alpha-fluoromethyl-histidine, alpha-methyl-h
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<220>
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<222> (2)..(2)
<223> Xaa at position 2 is Ala, Gly, Val, Leu, Ile, Lys, Aib, (1-aminoc
      yclopropyl) carboxylic acid, (1-aminocyclobutyl) carboxylic acid,
       (1-aminocyclopentyl) carboxylic acid, (1-aminocyclohexyl) carboxy
      lic acid, (1-aminocycloheptyl) carboxylic acid or (1-aminocyclooc
      tyl) carboxylic acid.
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<222> (12)..(12)
<223> Xaa at position 12 is Ser, Lys or Arg.
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<222> (16)..(16)
<223> Xaa at position 16 is Gly, Glu or Aib.
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      (17)..(17)
<223> Xaa at position 17 is Gln, Gly, Lys or Arg.
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<222> (20)..(20)
<223> Xaa at position 20 is Lys, Glu or Arg.
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<222> (24)..(24)
<223> Xaa at position 24 is Ala, Glu or Arg.
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<222> (28)..(28)
<223> Xaa at position 28 is Lys, Glu or Arg.
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<222> (29)..(29)
<223> Xaa at position 29 is Gly or Aib.
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<221> MISC FEATURE
<222> (30)..(30)
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<222> (31)..(31)
<223> Xaa at position 31 is Gly, Ala, Glu or Lys.
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<222> (32)..(32)
<223> Xaa at position 32 is Lys, amide or is absent.
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Xaa Xaa Glu Gly Thr Phe Thr Ser Asp Val Ser Xaa Tyr Leu Glu Xaa
Xaa Ala Ala Xaa Glu Phe Ile Xaa Trp Leu Val Xaa Xaa Xaa Xaa
                                25
            20
<210> 4
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<213> Gila monster
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<222> (39)..(39)
<223> Amidation of carboxy group.
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His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu
                                    10
Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn Gly Gly Pro Ser
                                25
           20
Ser Gly Ala Pro Pro Pro Ser
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<210> 5
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**<**220>

<223> Synthetic

<220>

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<222> (44)..(44)

<223> Amidation of carboxy group.

<400> 5

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Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn Gly Gly Pro Ser 20 25 30

Ser Gly Ala Pro Pro Ser Lys Lys Lys Lys Lys Lys 35